

SYLLABI

SUBJECT: KAJIAN KURIKULUM FISIKA SEKOLAH (SECONDARY SCHOOL PHYSICS CURRICULUM ANALYSIS)

1. Description of Subject

This subject covers:

- Background theory of curriculum development
- Theoretical review of secondary school science and physics curriculum,
- Role of school personnel in developing KTSP
- Curriculum planning and development,
- Trends and issues in science/physics curriculum,
- Problems in developing curriculum,
- Analysis of current science/physics curriculum,
- Syllabi and lesson plan development.

2. Aim and Advantage of the Subject

This subject helps students, as candidates of teachers:

- to be familiar with current science/physics curriculum,
- to implement it in schools,
- in the future, they may take part in developing science/physics curriculum.

3. Competencies to be achieved

- 1.) Understand philosophy of curriculum development, vision, mission, and goals of science/physics curriculum.
- 2.) Evaluate the current science/physics curriculum for secondary school.
- 3.) Be able to develop science/physics curriculum in school level.

4. Lecture Strategy

- Lectures
- Questions and Answers
- Information delivery for new information or topics which are not included in the curriculum
- Group work
- Assigning students to review physics curriculum for secondary schools.
- Presentation and discussion.

5. References

1. Anonim (2000), *Kajian Kurikulum Fisika Sekolah*. Yogyakarta: Jurdik Fisika, FMIPA UNY.
2. Olivia, P.F. (1992), *Developing the Curriculum, 3rd ed.* New York: Harper Collins Pub. Inc.
3. Paul Suparno (2009), *Kajian Kurikulum Fisika SMA/MA Berdasarkan KTSP*. Yogyakarta: Penerbit Universitas Sanata Dharma.
4. Brady, Laurie (1995), *Curriculum Development*. Sydney: Prentice Hall.
5. Kaufman, R.A. (1972), *Educational System Planning*. New Jersey: Prentice Hall Inc.
6. Gronlund, Norman, E (1995), *How to Write and Use Instructional Objective*. Englewoods, NJ: Prentice Hall Inc.

7. Oemar Hamalik (2005), *Kurikulum dan Pembelajaran*. Jakarta: Penerbit Bumi Aksara.
8. Vaidya, Narendra (1971), *The Impact of Science teaching*. New Delhi: Oxford&IBH Pub. Co.
9. Wiles, Jon and Bondi, Joshep (2007), *Curriculum Development*. Ohio: Pearson, Merrill Prentice Hall.

6. Learning Activities

Week	Topics	Sub topics	Activities
1	1. Introduction	1.1. Aims of the subject of Review of SSP curriculum 1.2. Contents of the subject of Review of SSP curriculum	<ul style="list-style-type: none"> • Presentation • Q and A • Discussion • Assignment
2, 3, 4	2. Background theory of curriculum development	2.1. Definitions of curriculum 2.2. Components of curriculum 2.2. Principles in curriculum development	<ul style="list-style-type: none"> • Presentation • Q and A • Discussion • Assignment
5, 6, 7, 8	3. Curriculum of educational unit (KTSP) for science and physics	3.1. Aims of curriculum 3.2. Scope of curriculum 3.3. Identification of standard of competencies 3.4. Identification of basic competencies 3.5. How to develop Indicators 3.6. How to develop Objectives (Learning outcomes) 3.7. How to develop Lesson plan	<ul style="list-style-type: none"> • Presentation • Q and A • Discussion • Assignment
9	Mid term examination 1	Pre-disclosure examination	
10, 11, 12	4. Case study to schools	4.1. Compile example of science/physics syllabi for junior/senior secondary schools. 4.2. Analysis of the syllabi. 4.3. Compile example of science/physics lesson plan for junior/senior secondary schools. 4.2. Analysis of the lesson plan.	<ul style="list-style-type: none"> • Collecting syllabi and lesson plan • Analysis should be based on background theory and KTSP. • Presentation
13, 14, 15	5. Using Instructional objectives to assess learning	5.1. How to use Instructional objectives in developing test 5.2. Writing test	
16	Mid term examination 2	This 2 nd mid term examination covers topics 3, 4, 5.	Written test

7. Assignment

1. Students should read topics to be discussed in the lectures before lecturing.
2. Students, individually, summarize physics topics should be taught in secondary schools.
3. Students, working in groups of 4 write and present scientific paper regarding physics curriculum for secondary school (topics to be proposed by groups and to be decided by lecturer).
4. Students, working in groups of 3 collecting syllabi and lesson plan of science/physics (secondary school), analyze them, and finally present them in class for discussing.
5. Students, individually, develop a test based on certain basic competencies mentioned in the KTSP curriculum.